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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/818,936	03/28/2001	Walter Eevers	Q63636	9629

7590 05/09/2006

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EXAMINER

COLE, ELIZABETH M

ART UNIT	PAPER NUMBER
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1771

DATE MAILED: 05/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/818,936

Applicant(s)

EEVERS ET AL.

Examiner

Elizabeth M. Cole

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: ____

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1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 2/22/06 has been entered.
2. Claims 1-9 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification as originally filed does not provide support for the limitation that the adhesive layer is coextensive with the perforated layer. The portions of the specification pointed to by Applicant as providing support state how the adhesive layer is applied but do not state where the adhesive layer is applied, such as over the entire surface of the film.
3. Claims 1-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 1-10 recite a water permeable tape but also recite that the adhesive layer is not perforated. It is not clear how the tape can be water permeable if the adhesive layer is continuous and does not comprise any perforations.
4. With regard to claim 10, Applicant claims an adhesive tape. However, the claim also recites that a semiconductor wafer or material is bonded to the tape. The scope of

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claim 10 is therefore not clear because it is not clear whether the tape alone or the tape in combination with the semiconductor wafer is being claimed. Since the combination of the tape and the semiconductor wafer are a different invention from a tape and since applicant has already received an action on the merits for the tape and the method of using the tape, it will be presumed that the limitations regarding the semiconductor wafer or material are statements of intended use.

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2, 4-10 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over JP09321084, (equivalent to U.S. Patent No. 6,114,753). JP '084 discloses a tape to which a semiconductor wafer or material can be bonded comprising a support structure and adhesive layer(s) deposited on the support structure. See col. 3, lines 31-47. The support structure can be a porous material such as a mesh or a fabric. See col. 3, lines 31-47; col. 7, lines 34-55; col. 13, lines 14-20, embodiment 11. It is noted that Applicant's specification at page 2, fourth

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full paragraph states that fabrics are encompassed by the recitation of "film" in the instant claims. The adhesive layers of JP '084 are not perforated. The adhesive can be a thermoplastic or thermosetting material and can comprise acrylate resins, as well as rubber based adhesives. See col. 6, lines 9-45. JP '084 does not specifically disclose the cavity ratio, elongation or tensile strength of the material. However, with regard to the cavity ratio, JP '084 teaches employing a porous mesh film or a fabric and therefore JP '084 appears to teach the identical structure and therefore the material of JP '084 would either inherently possess the claimed cavity ratio, elongation, and tensile strength claimed or else it would have been obvious to one of ordinary skill in the art at the time the invention was made to have selected the appropriate cavity ratio, tensile strength and elongation through the process of routine experimentation which resulted in a tape having the desired adhesive properties, bonding between the support and the adhesive as well as between the tape and the semiconductor device. When the reference discloses all the limitations of a claim except a property or function, and the examiner cannot determine whether or not the reference inherently possesses properties which anticipate or render obvious the claimed invention the examiner has basis for shifting the burden of proof to applicant as in *In re Fitzgerald*, 619 F.2d 67, 205 USPQ 594 (CCPA 1980). See MPEP §§ 2112- 2112.02.

7. Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP09321084, (equivalent to U.S. Patent No. 6,114,753). JP '084 discloses a tape to which a semiconductor wafer or material can be bonded as set forth above. JP '084 does not disclose the claimed aperture size. However, JP '084 teaches that the

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presence of apertures is helpful in the support structure because it improves the anti reflow properly at the moisture absorbing time by controlling the adhesion area. See col. 7, lines 45-55. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have selected the size of the apertures through the process of routine experimentation, motivated by the teaching of JP '084 that the presence and size of the apertures improves the anti reflow properly at the moisture absorbing time by controlling the adhesion area.

8. Applicant's arguments have been fully considered but are moot in view of the new grounds of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth M. Cole whose telephone number is (571) 272-1475. The examiner may be reached between 6:30 AM and 6:00 PM Monday through Wednesday, and 6:30 AM and 2 PM on Thursday.

Mr. Terrel Morris, the examiner's supervisor, may be reached at (571) 272-1478.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

The fax number for all official faxes is (571) 273-8300.



Elizabeth M. Cole
Primary Examiner
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e.m.c